

SF-83 SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY
STANDARD OF PERFORMANCE
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
FOR VINYL CHLORIDE

1. Identification of the Information Collection

1(a) Title of the Information Collection

ICR for NESHAP Subpart F- Vinyl Chloride

1(b) Short Characterization/Abstract

The National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Vinyl Chloride (VC) were proposed on December 24, 1975, promulgated on October, 21, 1976, and amended on June 7, 1977, September 30, 1986, September 23, 1988 and December 23, 1992. These standards apply to exhaust gases and oxychlorination vents at ethylene dichloride (EDC) plants; exhaust gases at vinyl chloride monomer (VCM) plants; and exhaust gases, reactors opening losses, manual vent valves, and stripping residuals at polyvinyl chloride (PVC) plants. The standards also apply to relief valves and fugitive emission sources at all three types of plants. In the Administrator's judgement, vinyl chloride emissions from polyvinyl chloride (PVC), ethylene dichloride (EDC), and vinyl chloride monomer (VCM) plants cause or contribute to air pollution that may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness. Vinyl chloride is a known human carcinogen which causes a rare cancer of the liver.

Establishment of a continuous monitoring program is a high priority of the Agency. The standards require continuous monitoring of the reactor pressure and temperature. The continuous monitoring system monitors VC emissions from the stack to judge compliance with the numerical limits in the standards. The parameters are used to judge the operation of the reactor so that the source and EPA will be aware of improper operation and maintenance.

Adequate recordkeeping and reporting ensures that affected facilities continue to operate control equipment and use proper work practices to achieve compliance. In addition, reporting assists EPA in identifying new facilities subject to the standards. The standards implicitly require initial reports required by the General Provisions of 40 CFR §61.7 and §61.9. These initial reports include application for approval of construction or modification, the notification of startup, and the notification of performance testing. The standards also require quarterly reporting of vinyl chloride emissions from stripping, reactor openings, and exhausts. Reports must be submitted within 10 days of each valve discharge and manual vent valve discharge. All reports are sent to the delegated State authority. In the

event that there is no such delegated State authority, the reports are sent directly to the EPA Regional Office. Facilities must also maintain records of reactor parameters and emissions as well as records related to malfunctions, calibrations, and leaks detected.

Approximately 44 sources are currently subject to the standard, and it is estimated that no additional sources will become subject to the standard in the next three years.

Following approval of the previous ICR, OMB requested that EPA undertake a review of the need for continuous area monitoring- and of whether there may be other less burdensome approaches that would provide the public with equal or greater protection in the event of major chemical releases. EPA considered OMB's comment and upon review of alternative monitoring approaches has concluded that emissions of vinyl chloride, a hazardous air pollutant, should be continuously monitored to ensure adequate protection of public health. EPA considers the existing monitoring requirements to be the least burdensome on the regulated entities.

2. Need for and Use of Collection

2(a) Need/Authority for the Collection

The EPA is charged under Section 112 of the Clean Air Act, as Amended, to establish standards of performance for each category or subcategory of major sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction. In addition, Section 114(a) states that the Administrator may require any owner or operator subject to any requirement of this Act to:

“(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use audit procedures, or methods; and (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) Keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.”

In the Administrator's judgement, vinyl chloride emissions from the National Emission Standard for Vinyl Chloride can cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, National Emission Standards for Hazardous Air Pollutants were promulgated for this source category at 40 CFR Part 61, Subpart F.

2(b) Practical Utility/Users of the Data

The control of emissions of vinyl chloride from plants which produce: 1) ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, 2) vinyl chloride by any process and/or 3) one or more polymers containing any fraction of polymerized vinyl chloride requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of vinyl chloride from these plants result from the operation of the affected facilities. These standards rely on the reduction of vinyl chloride emissions by monitoring on a continuous basis the emissions from the sources for which emissions limits are prescribed in §§61.62(a) and (b), 61.63 (a), and 61.64(a)(1), (b), (c), and (d), and for any control system to which reactor emissions are required to be ducted in §61.64(a)(2) or to which fugitive emissions are required to be ducted in §61.65(b)(1)(ii), and (b)(2), (b)(5), (b)(6) (ii) and (b)(9)(ii). The required notifications are used to inform the Agency or delegated authority when a source becomes subject to the standard. The reviewing authority may then inspect the source to check if the standard is being met. The information generated by the monitoring, recordkeeping and reporting requirements described in this ICR is used by the Agency to ensure that facilities continue to operate in compliance with the National Emissions Standard for Vinyl Chloride. Adequate monitoring, recordkeeping, and reporting is necessary to ensure compliance with these standards, as required by the Clean Air Act. The information collected from recordkeeping and reporting requirements is also used for targeting inspections, and is of sufficient quality to be used as evidence in court.

3. Non-duplication, Consultations, and Other Collection Criteria

The recordkeeping and reporting is required under 40 CFR Part 61, Subpart F.

3(a) Non-duplication

If the standard has not been delegated, the information is sent to the appropriate EPA Regional Office. Otherwise, the information is sent directly to the delegated State or Local Agency. If a State or Local Agency has adopted their own similar regulation to implement the Federal Regulation, a copy of the report submitted to the State or Local Agency can be sent to the Administrator in lieu of the report required by the Federal Standard. Therefore, no duplication exists.

3(b) Public Notice Required Prior to ICR Submission to OMB

An announcement of a public comment period for renewal of this ICR was published in the Federal Register on February 1, 2001.

3(c) Consultations

No comments were received on the burden published in the Federal Register.

3(d) Effects of Less Frequent Collection

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the required standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the main consequence would be that the chances of detecting poor operation and maintenance of control equipment would decrease.

3(e) General Guidelines

None of the reporting or recordkeeping requirements violate any of the regulations established by OMB in 5 CFR 1320.6.

3(f) Confidentiality

The required information consists of emissions data and other information that have been determined not to be private. However, any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, Chapter 1, Part 2, Subpart B - Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

3(g) Sensitive Questions

None of the reporting or recordkeeping requirements contain sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/SIC Codes

The respondents of the recordkeeping and reporting requirements are owners or operators of ethylene dichloride, vinyl chloride, and polyvinyl chloride manufacturing plants. The SIC code for the respondents affected by the standards is SIC (U.S. Standard Industrial Classification) 2821 which corresponds to the NAICS (The North American Industry Classification System) 325211.

4(b) INFORMATION REQUESTED

(i) Data Items

All data in this ICR that is recorded and/or reported is required by 40 CFR Part 61, Subpart F - National Emission Standard for Vinyl Chloride.

A source must make the following reports

Reports for NESHAP SUBPART F	
Notification of construction or modification application	61.07
Notification of anticipated startup	61.09(a)(1)
Notification of actual startup	61.09(a)(2)
Notification of emissions testing (performance test)	61.13(c)
Emissions test (performance test) report	61.13(f)
Notification of physical or operational change	61.15
Application for waiver of testing	61.13(i)(1)
Application for equivalent equipment and procedures	61.66
Initial report	61.69
Quarterly report	61.70
Manual vent valve (MVV) discharge report	61.64(a)(3)
Relief valve discharge (RVD) report	61.65(a)

A source must maintain the following records

Recordkeeping for NESHAP SUBPART F	
Startups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative	61.14(f)
Emission test results and other data needed to determine emissions	61.13(g) & 61.71(a)(3)
Records of leak detected	61.71 (a)(1&2)
Performance test records, leaks detected, emissions records, and daily operating records are required to be retained on-site for 3 Years.	61.67(f) & 61.71

(ii.) Respondent Activities

Respondent Activities
Read instructions.
Write the notifications listed above
Perform initial performance test, Reference Method 106, 107, and/or 601 and repeat performance tests if necessary.
Prepare reports listed above.
Enter information required to be recorded above.
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.
Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information.
Develop, acquire, install, and utilize technology and systems for the purpose of disclosing and providing information.
Adjust the existing ways to comply with any previously applicable instructions and requirements.
Train personnel to be able to respond to a collection of information.
Transmit, or otherwise disclose the information.

5. The Information Collected--Agency Activities, Collection Methodology, and Information Management

5(a) Agency Activities

EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information.

Agency Activities
Observe initial performance tests and repeat performance tests if necessary.
Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.
Audit facility records.

Agency Activities
Input, analyze, and maintain data in the Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS) database.

5(b) Collection Methodology and Management

Following notification of start-up, the reviewing authority might inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard, and note the operations and maintenance of equipment and the use of proper work practices by trained operators.

Information contained in the reports is entered into AFS which is operated and maintained by EPA's Office of Air Quality Planning and Standards. AFS is EPA's database for the collection, maintenance, and retrieval of compliance and annual emission inventory data for over 100,000 industrial and government-owned facilities. EPA uses AFS for tracking air pollution compliance and enforcement by Local and State regulatory agencies, and EPA Regional Offices and Headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner or operator for three (3) years.

5(c) Small Entity Flexibility

There are no small businesses affected by this standard.

5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown in Table 2: Industry Burden.

6. Estimating the Burden and Cost of the Collection

Table 2 documents the computation of individual burdens for each of the recordkeeping and reporting requirements applicable to the industry subject to this Subpart. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The Agency may not conduct or sponsor, and a person is not required to respond to, a

collection of information unless it displays a currently valid OMB control number.

6(a) Estimating Respondent Burden

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated at 16,159 persons-hours (Column E of Table 2). These hours are based on Agency studies and background documents from the development of the standards or test methods, Agency knowledge and experience with the National Emission Standards for Hazardous Air Pollutants (NESHAP) program, the previously approved ICR, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses a Technical Labor Rate of \$55.34 per hour. This rate is from the United States Department of Commerce Bureau of Labor Statistics, March 2000, "Table 10. Private industry, by occupational and industry group." In order to be consistent with the previous ICR, we are using the technical wage rate which was also used in the previous ICRs. This rate is from column 1, "Total Compensation." The wage rate has been increased by 110% to account for the benefit packages available to those employed by private industry.

(ii) Estimating Capital and Operations and Maintenance Costs

The industry costs associated with the information collection activity in this standard are labor and the capital start-up and operations and maintenance (O&M) costs associated with continuous emissions monitoring. The capital start-up costs are one-time costs when a facility becomes subject to the standard. The annual O&M costs are ongoing costs to maintain the monitoring system as well as other administrative costs such as photocopying and postage.

(iii) Capital/Start-up vs. Operating and Maintenance (O&M) Costs

Capital/Start-up vs. Operating and Maintenance (O&M) Costs						
(A)	(B)	(C)	(D)	(E)	(F)	(G)
Continuous Monitoring device	Startup cost (\$) for 1 affected facility	# of new affected facilities to start-up	Total start up (B X C)	Annual O&M costs (\$) for 1 affected facility	# of affected facilities with O&M	Total O&M (E X F)

Capital/Start-up vs. Operating and Maintenance (O&M) Costs						
Continuous Emission Monitor (CEM)	\$150,000	0	\$0	\$45,000	44	\$1,980,000

The total capital/start-up costs for this ICR are \$0. The capital start-up costs are one time costs when a facility becomes subject to this subpart. This is based on our assumption that no new sources will be subject to this subpart over the next three (3) years. This is the total of column D. This cost is shown on the OMB 83-I form in block 14 letter a: Total annualized capital/startup costs. The numbers in block 14 of the OMB 83-I form are rounded to show the cost in thousands of dollars.

The total operating and maintenance (O&M) costs for this ICR are \$1,980,000. This based on 44 existing sources multiplied by \$45,000.00 for upkeep of the monitoring devices. This is the total of column G. This cost is shown on the OMB 83-I form in block 14 letter b: Total annual costs (O&M). The numbers in block 14 of the OMB 83-I form are rounded to show the cost in thousands of dollars.

The total respondent costs is the sum of the capital start up costs and the annual operations and maintenance costs. Thus the industry's average annual cost for capital and O&M for this subpart over the next three years is estimated to be \$1,980,000. This cost is shown on the OMB 83-I form in block 14 letter c: Total annualized cost requested. The numbers in block 14 of the OMB 83-I form are rounded to show the cost in thousands of dollars.

6(c) Estimating Agency Burden and Cost

The only Federal costs are user cost associated with analysis of the reported information. Publication and distribution of the information are part of the AFS program. Examination of records to be maintained by the respondents will occur as part of the periodic inspection of sources, which is part of EPA's overall compliance and enforcement program.

The average annual Federal Government cost during the 3 years of the ICR is estimated to be \$142,721.92. The cost is based on an average hourly wage of a GS-10 step 1 and travel associated with compliance activities. Details upon which this estimate is based appear in Table 1: Agency Burden (A different hourly rate was used in the past, but because the previous ICR provided no explanation for the dollar amount for salary this renewal will use the going standard fee.).

6(d) Estimating the Respondent Universe and Total Burden and Costs

Respondent Universe					
Regulation Title	(A) # new sources per year	(B) # of initial reports for new sources	(C) # existing sources	(D) # of reports for existing sources	(E) total annual responses (AxB.)+(CxD)
NESHAP, Subpart F	0	5	44	7	308

The number of total respondents is 44. This number is the sum of Column A and Column C of the *Respondent Universe* table. It is shown on the OMB 83-I form in block 13 a. This is the number of existing sources plus the number of new sources anticipated in one year.

The total annual responses is 308. This number is in column E of the *Respondent Universe* table. It is shown on the OMB 83-I form in block 13 b. The total annual labor costs are \$894,239.06. This number is not shown on the OMB 83-I form, only the burden hours are reflected in block 13c. Details upon which this estimate is based appear in Table 2: Industry Burden.

The total annual capital and O&M costs to the regulated entity are \$1,980,000. This number is shown on the OMB 83-I form in block 14 c. These costs are detailed in section 6 b (iii) *Capital/Start-up vs. Operating and Maintenance (O&M) Costs*.

6(e) Bottom Line Burden Hours and Costs Tables

Reference Tables 1 & 2.

6(f) Reasons for Change in Burden

The increase in burden from the most recently approved ICR is due to the use of more accurate industry and EPA hourly wages supported by information from the Bureau of Labor Statistics.

6(g) Burden Statement

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a

collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency, Mail code 2822, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Include the EPA ICR number and OMB Control Number in any correspondence.

Part B of the Supporting Statement

This part is not applicable because no statistical methods were used in collecting this information.